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OECD Trade Barriers Faced by the Successor States of the Soviet Union

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Opportunities to expand investments and exports in the former Soviet Union are unlikely until the OECD governments, especially in the European Community, reduce tariff and nontariff barriers enough to put the newly independent states of the former Soviet Union on an equal footing with other countries.

This paper—a product of the International Trade Division, International Economics Department—is part of a larger effort in the department to analyze and predict structural changes in trade and to identify factors operating to restrain trade. Copies of this paper are available free from the World Bank, 1818 H Street NW, Washington, DC 20433. Please contact Jean Jacobson, room S7-035, extension 33710 (September 1993, 35 pages).

Using a comprehensive World Bank-UNCTAD data base on tariff and nontariff barriers (NTBs), Kaminski and Yeats examine the incidence of OECD trade barriers to exports of the former Soviet Union (FSU). OECD markets have grown steadily in importance in the past decade and now receive more than half of FSU exports. And additional trade could help the FSU republics make the transition to market economies.

Overall, OECD tariffs that the FSU republics face are 70 to 90 percent higher than the average paid on all goods imported, but their worst effect is the result of the *margins of preference* they give other (non-FSU) exporters. For example, because of a special EFTA-EC protocol, manufactures are traded duty-free between countries in these two blocs, while similar (competing) FSU goods may face duties of 20 percent or more.

No significant trade expansion will occur until nontariff barriers are liberalized in NTB-“ridden” product groups of interest to FSU exporters. Sectors in which NTBs are particularly important include fish, fruit, sugar, vegetables, beverages, textiles, clothing, and ferrous metals. OECD trade barriers on some FSU commodity exports provide high levels of “effective protection” that constrain the efforts of the newly independent states of the FSU (NISs) to increase domestic commodity processing.

Although the United States has granted most-favored-nation status to the NISs (excluding Azerbaijan), and the European Community recently signed the Agreements on Trade, Commercial, and Economic Cooperation with the Baltic states, these developments have not substantially improved their market access. Because of geographic proximity and the existing transportation network, the European market is the most important OECD market for most NISs. But under present EC arrangements, NIS products are subject to higher tariffs and more restrictive nontariff barriers than exports from EFTA members, Lomé Convention signatories, or former European CMEA members (the Czech Republic, Hungary, Poland, Romania, and Slovakia). Lower wage rates in many NISs may not be sufficient to compensate for their generally lower productivity and the losses in value added (triggered by higher tariffs) that exporters have to absorb to compete in protected markets.

Except for exports of energy and industrial raw materials, trade opportunities for many products in which the newly independent states of the former Soviet Union might have a comparative advantage are greatly restricted by OECD tariffs and nontariff barriers.

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**OECD TRADE BARRIERS FACED BY THE SUCCESSOR STATES
OF THE SOVIET UNION**

by

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I. Introduction

Previous analyses of tariff and nontariff barriers have focussed almost exclusively on trade between developing and developed countries, or on their intra-trade. For several reasons relatively little attention has been given to OECD or developing countries' barriers to exports from Eastern Europe and the former Soviet Union (Olechowski and Yeats 1982a and 1982b are among the few studies undertaken). The political climate was not conducive to the reduction of OECD barriers to East-West trade, so there was little incentive for related research on this subject. Also, the former centrally planned countries did not participate in a series of GATT multilateral trade negotiations, starting with the 1947 Geneva Round (the USSR was not a GATT member), so they did not require background analyses of foreign trade barriers to support their negotiating position. Finally, economic systems based on central planning made it impossible for them to pursue "outward oriented" trade strategies aimed at increasing exports to markets outside the Council for Mutual Economic Assistance (CMEA)¹.

The dissolution of the former Soviet Union (FSU) has prompted research in assisting the newly independent states (NISs) to make the transition to market economies. It is rightly believed that increased trade with the West could provide a significant stimulus to this end. Recognizing the need for background analysis to identify constraints to increased trade, this paper examines the influence of current

* The authors wish to acknowledge helpful comments from Ronald Duncan, Costas Michalopoulos and Vikram Nehru.

¹ The CMEA was officially dissolved at its 46th general meeting on June 28, 1991. Its members included Bulgaria, Cuba, Czechoslovakia, German Democratic Republic, Hungary, Mongolia, Poland, Romania, Soviet Union, and Vietnam.

OECD trade barriers facing the NISs.² By way of introduction, both United Nations and FSU statistics are used to assess the current, and previous, importance of OECD markets for FSU exports. Statistics on OECD tariff and nontariff barriers, combined with estimates of the NISs' pre-independence export patterns, are then employed to determine which products, and which NISs, are most seriously affected by these restrictions. The structure of OECD tariffs is also analyzed, using the "effective protection" concept, to assess their importance as constraints to further FSU processing of natural resources. The study concludes with an overall evaluation of the importance of OECD trade barriers facing exports from the FSU and considers ways in which these restrictions might be liberalized.

II. The Growing Importance of OECD Markets

Aside from recent political developments, the importance of Western markets to Central Europe and the FSU has been growing for some time. For example, Table 1 indicates the values and shares of the FSU and other Eastern European countries' (the latter includes Bulgaria, Czechoslovakia, German Democratic Republic, Hungary, Poland, and Romania) exports to the OECD and other markets for selected years over the 1970-90 period; while Chart 1 shows details on the annual changes in trade

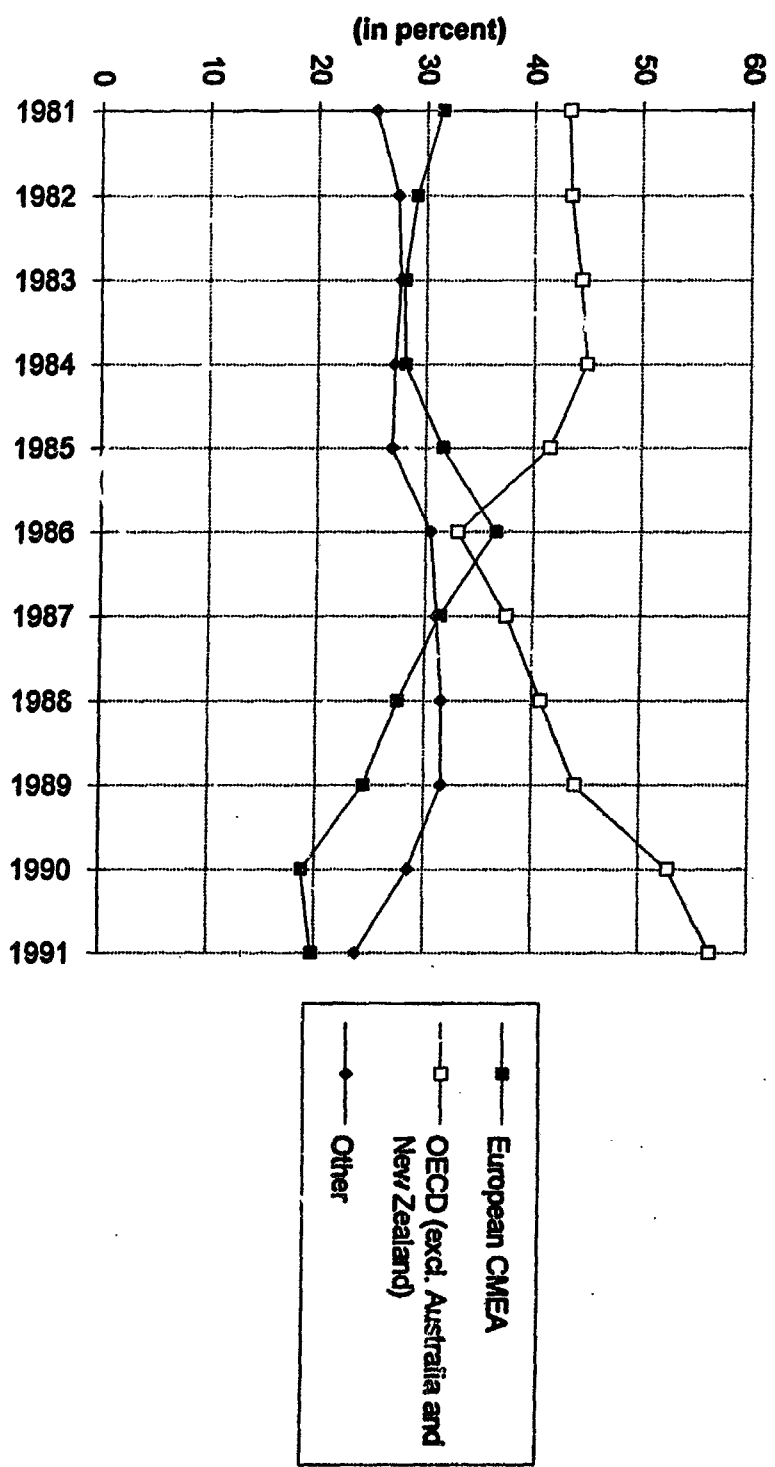
² These include former Baltic republics (Estonia, Latvia, and Lithuania), other European republics (Belarus, Moldova, Russia, and Ukraine), Transcaucasian republics (Armenia, Azerbaijan, and Georgia), and Central Asian republics (Kazakhstan, Kyrgyzstan, Tajikistan, Turkmenistan, and Uzbekistan). The Baltic republics became sovereign states in September 1991. The remaining became independent with the formal dissolution of the FSU, effective on January 1, 1992. The NISs are a very diversified group in terms of size and economic development. In terms of "economic size" the dissolution produced one very large economy, Russia; one medium-sized economy, Ukraine; and thirteen small ones. In terms of territory, there has emerged one enormous country, Russia; one very large country, Kazakhstan, with a territory representing 30% of the land area of the United States; three large countries of approximately the size of France (Ukraine, Turkmenistan, and Uzbekistan); and nine mid-sized and small countries. The NISs are at very different stages of economic development.

Table 1. The Relative Importance of OECD Markets for the FSU and Other Eastern European Countries

| <u>Year</u> | <u>Eastern Europe's Exports to</u> | | | | <u>FSU Exports to</u> | | | |
|--|------------------------------------|---------------------|------------------------|--------------|-----------------------|---------------------|------------------------|--------------|
| | <u>Eastern Europe & FSU</u> | <u>OECD Markets</u> | <u>Other Countries</u> | <u>World</u> | <u>Eastern Europe</u> | <u>OECD Markets</u> | <u>Other Countries</u> | <u>World</u> |
| (value of total exports in terms of US \$ billion) | | | | | | | | |
| 1970 | 11.57 | 4.78 | 1.74 | 18.10 | 6.76 | 2.78 | 3.26 | 12.80 |
| 1975 | 30.48 | 12.10 | 5.19 | 47.77 | 17.99 | 9.74 | 7.47 | 35.20 |
| 1980 | 27.90 | 23.54 | 9.63 | 61.06 | 17.81 | 26.70 | 13.43 | 57.94 |
| 1985 | 28.35 | 24.90 | 10.27 | 63.53 | 18.09 | 23.81 | 15.42 | 57.32 |
| 1990 | 23.79 | 33.85 | 8.22 | 65.86 | 11.10 | 31.05 | 16.91 | 59.06 |
| (share of total exports in terms of percentages) | | | | | | | | |
| 1970 | 64 | 26 | 10 | 100 | 53 | 22 | 25 | 100 |
| 1975 | 64 | 25 | 11 | 100 | 51 | 28 | 21 | 100 |
| 1980 | 46 | 39 | 15 | 100 | 31 | 46 | 23 | 100 |
| 1985 | 45 | 39 | 16 | 100 | 32 | 42 | 26 | 100 |
| 1990 | 36 | 51 | 13 | 100 | 19 | 53 | 29 | 100 |

Source: Data compiled from Economic Commission for Europe, Economic Survey of Europe in 1991-1992 (New York: United Nations, 1992), particularly Table C4 on page 315.

Chart 1: Major Export Markets of the Soviet Union, 1981-91



Source: ECE UN: Economic Survey of Europe in 1991-1992, New York: United Nations 1992
(Appendix Table C.4:315)

shares that occurred during the past decade.³ In 1970, approximately 53 percent (\$6.8 billion) of all USSR exports went to Eastern Europe; by 1990 this share had dropped to under 20 percent. While [UN ECE, 1991] and the UN COMTRADE data base suggest the FSU share of world trade peaked in 1983 at 3.4 percent, and steadily declined thereafter to 1.8 percent in 1990, this dramatic decline was accompanied by a rapid increase, from 22 to 53 percent, in the share of FSU exports going to OECD countries. Similarly, other Eastern European countries' intra-trade (plus exports to the FSU) fell from 64 to 36 percent of total exports. As was the case with the FSU, the OECD was the "other" Eastern European countries' major source of growth as their share of exports to these markets went from 26 to 51 percent.⁴

Table 2 shows the importance of individual OECD markets in 1991, and provides details on the commodity composition of their imports from the FSU. Over two thirds of FSU exports (\$29.4 billion) to the OECD went to the European Community (EC), with Germany receiving about 40 percent (\$8.5 billion) of the latter's total. The six EFTA members received 14 percent (\$4.2 billion went to these countries), with Finland accounting for about 45 percent of the EFTA total. With imports of \$900 million in 1991 the United States was a relatively unimportant market for the FSU, ranking slightly ahead of Austria and about \$200 million below the combined imports of Switzerland and Sweden. However,

³ Statistics on developments in foreign trade of the FSU are subject to considerable error, mainly because of difficulties involved in estimating trade based on "soft" payments arrangements with CMEA members and some developing countries (India being the most notable case). The estimates using the official "transferrable ruble" exchange rate yield higher values of Soviet trade (the soft component is significantly larger) than those based on the "corrected" rate. Thus, the estimate of the UN ECE (Economic Commission for Europe), which are not based on the Soviet official exchange rate, show lower value of Soviet trade in 1990 than the Soviet or World Bank/IMF estimates. The difference is significant: according to the UN ECE, the value of Soviet exports was US\$ 59.1 billion as compared with US\$ 104.7 billion (see Michalopoulos, 1993, table 1). Leaving aside the issue of which estimates better reflected the actual trade flows, we use UN ECE estimates because they cover a longer time span. However, both estimates provide support to the conclusion about the growing importance of OECD markets to the FSU.

⁴ While the data on 1992 exports are subject to a significant margin of error, they do suggest that the fall in the NISS' exports to the former CMEA and developing countries was significantly larger than the decline in exports to the OECD. According to a preliminary estimate, OECD markets received more than 50 percent of Russia's total exports.

Table 2. The Relative Importance of Individual OECD Markets for Exports from the Former Soviet Union, in 1991

| Product Group | Australia and New Zealand | European Community (12) | of which: | | | | European Free Trade Association | of which: | | | | Canada | U.S.A. | Japan | All OECD |
|---|------------------------------|----------------------------|-----------|---------|---------|---------|---------------------------------------|-----------|---------|--------|-------------|--------|--------|---------|-------------|
| | | | France | Germany | U.K. | Belgium | | Austria | Finland | Sweden | Switzerland | | | | |
| (value of 1991 imports in terms of US \$ million) | | | | | | | | | | | | | | | |
| All Goods (0 to 9) 1/ | 30.2 | 20,995.2 | 3,037.9 | 8,457.5 | 1,593.2 | 1,278.7 | 4,215.9 | 835.6 | 1,845.4 | 571.8 | 543.7 | 203.7 | 900.3 | 3,097.8 | 29,443.1 |
| All Foods (0 + 1 + 22 + 4) | 0.8 | 366.9 | 37.7 | 101.9 | 26.8 | 9.0 | 133.2 | 19.6 | 7.0 | 13.4 | 4.2 | 10.4 | 43.8 | 384.9 | 940.1 |
| Agricultural Materials (2 - 22 - 27 - 28) | - | 1,293.7 | 221.6 | 256.0 | 199.1 | 56.3 | 280.2 | 48.9 | 140.0 | 68.7 | 12.3 | 1.6 | 17.0 | 521.4 | 2,114.5 |
| Ores and Metals (27 + 28 + 68) | 14.7 | 1,734.8 | 263.9 | 807.4 | 74.2 | 109.3 | 73.7 | 90.0 | 103.9 | 57.4 | 335.4 | 80.9 | 216.0 | 1,221.9 | 4,022.1 |
| Fuels (3) | 0.1 | 12,657.3 | 2,153.3 | 6,032.7 | 839.6 | 540.3 | 2,623.2 | 622.8 | 1,328.1 | 244.0 | 123.4 | 44.9 | 201.5 | 462.1 | 15,789.1 |
| All Manufactures (5 to 8 - 68) of which: | 10.2 | 3,442.7 | 361.3 | 1,176.9 | 451.1 | 540.4 | 623.1 | 54.2 | 266.3 | 141.8 | 68.4 | 65.8 | 407.3 | 497.3 | 5,047.8 |
| Chemicals (5) | 1.5 | 934.2 | 221.8 | 181.4 | 157.2 | 57.5 | 253.8 | 24.5 | 89.0 | 102.0 | 6.9 | 2.1 | 231.2 | 65.2 | 1,488.1 |
| Textiles and Clothing (65 + 84) | 0.8 | 100.2 | 15.2 | 42.7 | 4.4 | 1.2 | 32.5 | 2.3 | 15.6 | 11.2 | 2.3 | 3.8 | 11.9 | 7.6 | 156.6 |
| Iron and Steel (67) | 0.2 | 559.8 | 28.2 | 273.1 | 10.9 | 17.5 | 37.6 | 5.5 | 17.9 | 9.3 | 4.0 | 1.6 | 33.4 | 292.8 | 995.4 |
| Machinery and Transport (7) | 4.6 | 1,050.3 | 62.3 | 514.3 | 192.1 | 59.4 | 16.7 | 15.8 | 100.5 | 11.1 | 3.2 | 11.1 | 27.7 | 16.0 | 1,275.4 |
| (share of total imports - percent) | | | | | | | | | | | | | | | |
| All Goods (0 to 9) 1/ | 100 | 100 | 100 | 100 | 100 | 100 | 100 | 100 | 100 | 100 | 100 | 100 | 100 | 100 | 100 |
| All Foods (0 + 1 + 22 + 4) | 3 | 2 | 1 | 1 | 2 | 1 | 3 | 2 | - | 2 | 1 | 5 | 5 | 12 | 3 |
| Agricultural Materials (2 - 22 - 27 - 28) | - | 6 | 7 | 3 | 12 | 4 | 7 | 6 | 8 | 12 | 2 | 1 | 2 | 17 | 7 |
| Ores and Metals (27 + 28 + 68) | 49 | 8 | 9 | 10 | 5 | 9 | 18 | 11 | 6 | 10 | 62 | 40 | 24 | 39 | 14 |
| Fuels (3) | - | 60 | 71 | 72 | 53 | 42 | 58 | 75 | 72 | 47 | 23 | 22 | 22 | 15 | 54 |
| All Manufactures (5 to 8 - 68) of which: | 34 | 16 | 12 | 14 | 28 | 42 | 15 | 6 | 14 | 28 | 13 | 32 | 45 | 16 | 17 |
| Chemicals (5) | 5 | 4 | 7 | 2 | 19 | 4 | 6 | 3 | 5 | 18 | 1 | 1 | 26 | 2 | 5 |
| Textiles and Clothing (65 + 84) | 3 | - | 1 | 1 | - | - | 1 | - | 1 | 2 | - | 2 | 1 | - | 1 |
| Iron and Steel (67) | 1 | 3 | 1 | 3 | 1 | 1 | 1 | 1 | 1 | 3 | 1 | 1 | 4 | 9 | 3 |
| Machinery and Transport (7) | 15 | 5 | 2 | 6 | 12 | 5 | 4 | 2 | 5 | 2 | 1 | 5 | 3 | 1 | 4 |

1/ In 1991 OECD countries imported approximately \$1.5 billion of goods classified in SITC 9 (Misc. Transactions) that are not included in product groups listed above.

Source: OECD member countries' imports from the former Soviet Union as reported in the United Nations' COMTRADE records.

the relatively low US trade values were at least partially due to the fact that the FSU did not have MFN (most-favored-nation) status and important exports (like urea) were subject to anti-dumping duties. The NISs' access to US markets improved throughout 1992, as they obtained MFN (most-favored-nation) status--except for Azerbaijan.⁵

With few exceptions, such as the relatively high share (26 percent) of chemicals in US imports, a similar pattern exists in the composition of exports to individual OECD markets. Energy products (SITC 3) comprised over 50 percent of all FSU exports with ores, minerals, and (nonferrous) metals accounting for about 14 percent of total trade. Within the ores and nonferrous metals group, worked silver and platinum (SITC 681) accounted for one-third of all shipments (in terms of value) while aluminum and nickel (SITC 684 and 683, respectively) combined added a further 36 percent (see Appendix Table 3, column 1 for details on trade in three-digit SITC ores, minerals and nonferrous metals products).

In 1991 manufactures were only 17 percent (\$5 billion) of total FSU exports to the OECD, with almost 70 percent of these shipments destined for the EC. Five three-digit SITC product groups, organic chemicals, radioactive materials, road motor vehicles, pig iron, and precious stones accounted for almost half of all manufactured exports (see Appendix Table 1, column 1). About 7 percent of FSU exports consisted of agricultural products (both foods and agricultural raw materials) with shaped and rough wood, fresh fish, and cotton being the most important products (see Appendix Table 2, column 1). In short, FSU exports were highly concentrated with 10 three-digit SITC products accounting for more than 50 percent of total nonfuel trade.⁶

⁵By October 1992 Armenia, Kyrgyzstan, Moldova, Russia, and the Ukraine had US MFN status, with Belarus, Georgia, Kazakhstan, Tajikistan, Turkmenistan and Uzbekistan receiving it since then. Azerbaijan is the only Republic not now receiving MFN treatment and, as a result, Azerbaijan's exports face US general tariffs averaging about 30 percent.

⁶In contrast, the ten largest three-digit US products account for about 36 percent of total exports. In France, Germany, Sweden, Switzerland, and the United Kingdom the largest ten products account for 30 to 39 percent of all exports.

III. FSU Exports by Republics⁷

The FSU republics' foreign trade data give valuations of trade flows in both domestic and world prices. The latter are reportedly based on weighted averages of trade with different partners and subsequently aggregated to 110 items. Since domestic pricing policies were a major source of trade distortions⁸, we employ world prices for valuations despite several reservations. For example, about 20 percent of FSU trade was with the CMEA and probably an equivalent amount was on the basis of "soft" settlements (e.g., India) and it is not clear how this exchange was accounted for in terms of world prices. In spite of such shortcomings, world prices provide a better "measuring stick" than domestic prices for assessing past export performance and potential vulnerability to OECD trade barriers.

Given their large size, it is not surprising that foreign trade of the FSU was the preserve of the European republics, although factors other than size accounted for Russia's share. Excluding the Russian Federation, Ukraine and Belarus, the combined contribution of all other republics amounted to less than 7% of total FSU 1989-91 exports. Russia accounted for around 77% of this total, Ukraine for around 13%, and Belarus for about 4%. In 1991, the joint contribution of the two largest Asian republics -- Kazakhstan and Uzbekistan -- was only 3%, and the Baltic and Transcaucasian republics' share in total exports was 1.2% and 1.3%, respectively (see Table 3).

The earlier observations concerning developments in FSU trade apply especially to Russia because of its prior dominant position in Soviet exports. The other republics were more inward-oriented, i.e., their shares in FSU exports were significantly lower than in inter-republic trade, reflecting state monopoly of trade at the Union level and the centrally controlled internal division of labor. The greater

⁷The analysis in this section is based mainly on data collected by Goskomstat on the flows of goods between former Soviet republics and the rest of the world in 1990. Trade data are derived from input-output tables, and the maximum item breakdown concurs with the Soviet 110-sector input-output tables. International agencies did not tabulate 1990 FSU trade data for the republics because they were not independent states.

⁸The prices were not market-clearing and did not reflect relative scarcities of products. They were also highly distorted by implicit and explicit subsidies. Intermediate products and raw materials tended to be undervalued in relation to the final output, since the bulk of value added was collected through turnover taxes levied on final products. As a result, exports of intermediate products and raw materials were understated and those of final products overstated.

Table 3. Shares of Individual Republics in Total FSU Exports, in 1989, 1990 and 1991

| | 1989 | 1990 | 1991 |
|--------------|-----------------|-------|-------|
| | ----- (%) ----- | | |
| Armenia | 0.10 | 0.11 | 0.10 |
| Azerbaijan | 0.60 | 0.70 | 0.73 |
| Georgia | 0.50 | 0.50 | 0.04 |
| Estonia | 0.20 | 0.19 | 0.07 |
| Latvia | 0.40 | 0.28 | 0.19 |
| Lithuania | 0.80 | 0.66 | 0.52 |
| Belarus | 3.40 | 3.36 | 3.79 |
| Moldova | 0.50 | 0.40 | 0.36 |
| Russia | 76.90 | 76.95 | 77.31 |
| Kazakhstan | 1.50 | 1.74 | 1.77 |
| Kyrgyzstan | 0.10 | 0.09 | 0.03 |
| Tajikistan | 0.50 | 0.60 | 0.64 |
| Turkmenistan | 0.20 | 0.18 | 0.22 |
| Ukraine | 12.90 | 12.87 | 12.74 |
| Uzbekistan | 1.40 | 1.36 | 1.48 |
| FSU-total | 100 | 100 | 100 |

Sources: CIS Goskomstat; World Bank; and UN ECE.

involvement of Russia in external transactions was the result of several factors: its endowment of many natural resources which constituted major Soviet export items; the centralization of foreign trade operations in FTOs (Foreign Trade Organizations) located mainly in Moscow; and the transportation infrastructure which prevented other potential net exporters of raw materials (especially those from Central Asia) from gaining direct access to world markets. A closer examination of Russia's respective contributions to internal and external exports in various product categories in 1989 and 1990 reveals a general tendency for greater relative involvement in external transactions when compared with other republics. This asymmetry was especially visible in non-ferrous ores (share in outside exports of 88 percent versus 23 percent in inter-republic trade) and non-ferrous metals (78 percent vs. versus 57 percent). The export structure of most other republics (especially of Central Asian) was almost the reverse. For instance, Kazakhstan exports of ferrous ores accounted for 56 percent of inter-republic exports but only for 2.5 percent of FSU exports; its exports of coal accounted for 28 percent of inter-republic exports and zero of outside exports; and its exports of oil products for 13 percent and 0.4 percent respectively. Similarly Turkmenistan's share in outside exports of gas was zero, whereas its share in inter-republic trade was around 10 percent. In consequence, these data do not give a good indication of the "outside" export potential of the NISs.

There was considerable variation in the destination of the republics' exports -- reflecting to a large degree both their specialization profiles and geographical proximity to various markets. In general, republics specializing in non-renewable, natural resource-intensive products contributed more to Soviet exports to the West than those exporting food and manufactures: those with a strong base in these latter products made a relatively larger contribution to Soviet exports to the CMEA (see Appendix Table 4 which tabulates shares of republics in total Soviet exports by major product categories). Exporters of raw materials -- ores and nonferrous metals (Kazakhstan, Tajikistan, Turkmenistan and Uzbekistan) and energy (Azerbaijan and Russia) --- were more oriented towards the OECD, whereas the

Table 4: Ten Largest Export Industries and their Shares in Exports outside the USSR in 1990

| Industries Share of the Top 10 | RUS. 77% | UKR. 73.1% | BELAR 61.3% | MOLD. 81.4% | ESTON 72.8% | LATV. 67.1% | LITH. 82.3% | ARM. 90.5% | AZER. 93.9% | GEOR. 85.4% | KAZAK 89.0% | KYRG. 91.7% | TAJK. 99.4% | TURK. 97.6% | UZBEK 94.0% |
|-----------------------------------|-------------|---------------|----------------|----------------|----------------|----------------|----------------|---------------|----------------|----------------|----------------|----------------|----------------|----------------|----------------|
| Animal Husbandry | | | | | | 2.3% | | | | | | | 0.2% | | |
| Meat Products | | | | 2.2% | | | 3.5% | | | | 1.7% | 1.9% | | 1.2% | |
| Fish Products | | | | | 24.7% | 8.0% | 2.2% | | | | | | | | |
| Dairy Products | | | | | 2.5% | 3.3% | | | | | | | | | |
| Fruit/Vegetables | | | | 9.3% | | | | | 1.7% | | | | | | |
| Other Food Products | | | | | | | | | | 1.9% | | 1.6% | 0.2% | | |
| Wines | | | | 2.8% | | | | 2.2% | | 2.3% | | | | | |
| Tobacco | | | | | | | | | | | | 1.4% | | | |
| Ferrous Ores | | 5.7% | | | | | | | | | 1.0% | | | | |
| Non-ferrous Ores | | | | | | | | 2.0% | | | | | | | |
| Sawmill | | | | | | 2.4% | | | | | | | | | |
| Coal | | 5.5% | | | | | | | | | | | | | |
| Coking Products | | | | | 12.4% | | | | 1.1% | | | | | | |
| Oil Products | 22.1% | 7.7% | 28.0% | | | | 40.7% | | 61.8% | 46.7% | 4.1% | | | 21.0% | 1.5% |
| Gas Products | 14.3% | | | | | | | | | | | | | | |
| Electricity | | 10.0% | | 37.3% | | | | | | | | | | | |
| Petroleum Oils | | | | | | 2.5% | | | | | | | | 1.8% | |
| Basic Chemicals | 1.9% | 6.0% | 5.2% | | | | 1.9% | | | 2.6% | 5.0% | | 0.2% | 1.3% | 3.9% |
| Organic Chemicals | | | | | | | | | | | 1.9% | | | | |
| Chemical Fibers | | | | | | | | 7.8% | | | | | | 2.2% | |
| Mineral Chemistry | | | 3.5% | | | | | | | | | | | 0.9% | |
| Leather | | | | | | | | | | | 1.7% | | | 0.7% | |
| Rubber & Asbestos | | | | | | | | | | | | | 0.2% | | |
| Wool Products | | | | | | | | 3.1% | | | | 2.5% | 0.5% | 2.1% | |
| Cotton Products | | | | | 8.5% | | | | 5.8% | | 3.5% | | 17.8% | 65.3% | 55.3% |
| Silk Products | | | | | | | | | | | | | 0.7% | | 1.7% |
| Non-ferr. Metals | 6.3% | | | | | | | | | 3.9% | 47.3% | 62.2% | 78.8% | | 3.7% |
| Ferrous Metals | 4.4% | 14.7% | | 6.4% | | | | | 1.3% | 14.8% | 20.8% | | | | |
| House. Appliances | | | 2.6% | 4.7% | | | 4.0% | | 4.6% | | | | | | 0.9% |
| Electro-technical Eq. | | | | | 5.4% | | 5.0% | 5.5% | 1.4% | | | 1.9% | | | 1.9% |
| Metal Products Equip. | | | | | | 2.2% | | | | | | | | | |
| Pumps | | | | 1.8% | | | | 2.0% | 8.7% | | | | | 1.3% | |
| Machine Tools | | | 2.7% | | | | 3.2% | 10.4% | | | | | | | |
| Energy & Power Equip. | 1.5% | | | | | | | | | | | | | | |
| Radio Electronics | 2.9% | 1.6% | 6.8% | 15.2% | | 34.5% | 16.4% | 14.3% | | | | 1.4% | | | |
| Autos & Parts | 4.4% | 3.5% | 10.6% | | | 5.1% | | | | | | | 5.6% | | |
| Tractors & Agri.Equip. | 3.1% | | 14.2% | | | 3.9% | | | | | | | 9.5% | | |
| Transportation Equip. | | | | | | | | | | | | | | | 4.3% |
| Shipbuilding | | 2.4% | | | | | | | | 3.4% | | | | | |
| Other Ind. Equip. | 16.1% | 13.8% | 6.1% | 2.2% | 3.5% | | 2.1% | | 2.3% | 5.8% | 1.4% | | 0.3% | | 15.1% |
| Consum. Ind. Equip. | | | | | | | | | | | | | 0.5% | | 6.1% |
| Tools | | | 2.7% | | 2.8% | | 3.5% | 30.3% | 5.1% | 1.9% | | | | | |
| Metalurgy Equip. | | | | 1.7% | | | | | | | | | | | |
| Precision Instr. | | | | | | | | | | | | 3.7% | | | |
| Sawn Goods | | | | | 3.1% | | | 6.2% | | 2.0% | | | | | |
| Furniture | | | | | 3.7% | 2.6% | | | | | | | | | |
| Other Products (misc.) | | | | | | 2.3% | | | | | | | | | |

— products not covered by NTBs and higher tariffs
 — products subject to both NTBs and higher tariffs

— products subject to higher tariffs
 — product subject to NTBs

Source: Goskomstat.

CMEA played a more important role for Armenia, Belarus, Ukraine and Moldova. Geographical proximity and cultural links account for the high share of the EFTA (mainly Finland and Sweden) in exports of the Baltic republics, and China in shipments originating in some Asian republics (Kazakhstan, Kyrgyzstan, and Uzbekistan). However, it appears that distance was not always a major determinant of trade volumes. For example, despite the geographical proximity of European CMEA markets, their share in the exports of the Baltic republics was much lower than that for most other republics, while India's share was considerably larger (see Appendix Table 5).

What were the major external export items of the republics in 1990? Table 4 draws on data compiled by the Goskomstat to provide an indication. For each republic, the ten largest exports -- as measured by their shares in all shipments (excluding inter-republic trade) -- are identified. Since exports of most republics were highly concentrated, Table 4 covers a high share of their total trade, i.e., between 67% (Latvia) to 99% (Tajikistan) of total exports. Petroleum products were among the top export earners, not only for the net energy exporters (Azerbaijan, Russia, Kazakhstan and Turkmenistan), but also for five other republics. Exports from the three Baltic republics and Moldova were clustered in agricultural products. Industrial raw materials and lightly-processed, resource-intensive products accounted for an important share of Soviet exports. These mainly originated in Russia, Ukraine, Belarus, Moldova and, to a lesser extent, Lithuania. For some republics there was a very high export concentration. For instance, non-ferrous metals accounted for 62% of Kyrgyzstan's exports and 79% of Tajikistan's exports, cotton products comprised 65% and 55%, respectively, of exports originating in Turkmenistan and Uzbekistan. Similarly, petroleum products accounted for around 62% of Azerbaijan's exports, for 47% of Georgia's exports and 41% of Lithuania's exports.

IV. Tariff Barriers Facing FSU Exports

How widespread are pre-Uruguay Round tariff barriers facing FSU exports, and on which products is their incidence highest? Table 5 shows the average duties on broad categories of goods

shipped to major OECD markets.⁹ To place the importance of these tariff rates in perspective, the table shows total 1991 OECD imports of each product group from the FSU. Appendix Tables 1 through 3 provide more detailed three-digit SITC trade and tariff statistics for manufactured goods, agricultural raw materials and foods, and ores, minerals and nonferrous metals.

Table 5 shows FSU exports faced relatively high OECD tariffs in several important sectors. The republics paid an average import duty of about 15 percent on food exports of approximately \$900 million to the EC, Finland, and Japan with several product sub-groups (fruit, sugar, and beverages) having average tariffs ranging from 23 to 40 percent. Import duties on some manufactured products like leather, clothing, and footwear in Japan, or clothing in the EC, Finland, Sweden and the United States averaged between 11 and 30%. However, the major adverse effects of OECD duties would be almost certainly due to FSU products often being required to pay considerably higher tariffs than similar (competing) goods exported by other countries.

Overall, tariffs in the United States and Japan averaged about 5.2% on FSU exports and EC duties averaged roughly two percentage points higher. These rates range from about 70 to 90% higher than the average tariff on all imports in these three markets.¹⁰ The underlying tariff-line level data also show the FSU often faced considerably higher import duties than those paid by other (competing) exporters of the same product due to extensive OECD preferences that differentiate among sources of

⁹From GATT records incorporated into the World Bank-UNCTAD "Software for Market Analysis and Restrictions to Trade" (SMART) data base. All reported tariffs are the average of the MFN or special preference duties that are applied to imports. See World Bank (1992, Appendix C) for a description of the SMART data base and model. The EC announced it will grant GSP treatment to the Republics in 1993 as "an exceptional temporary measure." Due to the uncertainty associated with the longer term application of GSP tariffs we show MFN rates in the following tables. Also, key products like steel, fish and textile and clothing exports are excluded from the EC scheme. Finally, Laird and Yeats (1987, p. 95) show the EC GSP has only a modest impact on tariff levels reducing the average MFN duty on manufactures (excluding chemicals) from 8.1 to 6.4 percent.

¹⁰ After accounting for special preferences, Laird and Yeats (1987:94-95) estimate that the average tariff on all Japanese and US imports was 3.1 and 3.4%, respectively. The lower average Japanese duty was due largely to the relatively high share of very low tariff crude materials (i.e., metal ores, nonmetallic minerals, unrefined petroleum, etc.) in total imports. The overall EC(10) tariff was estimated to be even lower (2.5%) due to the extensive EC preferences.

Table 5. Average OECD Tariffs Applied to Major Export Products of the Former Soviet Union

| Product Group (SITC) | 1991 | | | | | | |
|---|----------------------------------|---------------------------------|---------|-------|--------|-------------|-------|
| | Total OECD Imports (\$ mill.) | Average applied tariff rate (%) | | | | | |
| | | EEC(12)* | Finland | Japan | Sweden | Switzerland | U.S.A |
| All Food Products (0 + 1 + 22 + 4) | 940 | 14.6 | 14.6 | 15.3 | 2.7 | 6.7 | 8.9 |
| Fresh and frozen fish (03) | 710 | 15.5 | 4.0 | 7.0 | 1.2 | 0.0 | 5.3 |
| Fresh and preserved fruit (051 to 053) | 56 | 15.3 | 15.7 | 23.3 | 0.0 | 6.3 | 18.1 |
| Beverages (11) | 59 | 14.4 | 40.0 | 35.5 | 1.2 | 10.3 | 14.2 |
| Agricultural Materials (2 - 22 - 27 - 28) | 2,115 | 1.6 | 0.6 | 2.4 | 0.6 | 0.4 | 1.6 |
| Wood and lumber (24) | 1,380 | 1.3 | 0.0 | 2.3 | 0.0 | 2.0 | 0.0 |
| Pulp and paper (25) | 125 | 0.0 | 0.0 | 2.2 | 0.0 | 0.2 | 0.0 |
| Textile fibers (26) | 435 | 2.9 | 0.0 | 2.2 | | 0.4 | 2.3 |
| Ores, Minerals and Metals (27 + 28 + 68) | 4,022 | 2.0 | 6.3 | 2.2 | 6.3 | 0.6 | 0.6 |
| Metal ore and scrap (28) | 493 | 0.2 | 0.0 | 0.0 | 0.0 | 0.1 | 0.6 |
| Nonferrous metals (68) | 3,434 | 3.8 | 0.8 | 4.3 | 0.5 | 1.0 | 0.7 |
| All Manufactured goods (5 to 8 - 68) | 5,048 | 6.7 | 9.0 | 4.6 | 5.2 | 1.7 | 4.7 |
| Chemical elements (51) | 1,085 | 8.1 | 2.1 | 4.9 | 1.9 | 0.7 | 2.2 |
| Manufactured fertilizer (56) | 293 | 6.5 | 0.0 | 0.0 | | | |
| Leather and goods (61) | 34 | 4.9 | 10.3 | 14.5 | 3.1 | 0.3 | 2.6 |
| Wood manufactures (63) | 132 | 7.1 | 2.9 | 2.5 | 2.6 | 4.4 | 5.4 |
| Textile yarn and fabric (65) | 112 | 9.9 | 24.1 | 8.3 | 11.6 | 5.4 | 7.8 |
| Ferrous metals (67) | 925 | 5.5 | 5.1 | 4.9 | 2.3 | 2.1 | 2.4 |
| Metal Manufactures (69) | 30 | 5.1 | 6.3 | 4.9 | 4.1 | 1.2 | 3.4 |
| Nonelectric machinery (71) | 254 | 4.6 | 5.0 | 2.4 | 3.6 | 0.7 | 3.2 |
| Electrical machinery (72) | 126 | 6.4 | 8.9 | 2.1 | 3.7 | 1.2 | 3.5 |
| Transport equipment (73) | 895 | 6.7 | 4.8 | 4.4 | 5.3 | 2.3 | 1.7 |
| Furniture (82) | 71 | 5.7 | 5.8 | 4.8 | 3.8 | 9.9 | 3.7 |
| Clothing (84) | 45 | 12.1 | 30.7 | 16.3 | 11.7 | 12.3 | 11.4 |
| Footwear (85) | 27 | 9.8 | 12.8 | 23.5 | 11.1 | | 9.3 |
| Scientific instruments (86) | 50 | 6.0 | 4.3 | 4.0 | 2.8 | 1.1 | 4.4 |
| Misc. Manufactures (89) | 167 | 5.8 | 6.4 | 3.6 | 3.4 | 0.5 | 4.5 |
| All non energy goods (0 to 9 -3) | 13,654 | 6.8 | 8.7 | 5.3 | 4.5 | 2.2 | 5.2 |
| All Goods (0 to 9) | 29,443 | 6.6 | 8.5 | 5.2 | 4.4 | 2.1 | 5.0 |

Note: Blank spaces indicate no trade occurred for the product group.

Source: OECD trade statistics from COMTRADE records. Tariff records from the SMART Data base.

* The EC announced it will extend GSP treatment to the Republics in 1993 as "an exceptional and temporary measure." Due to the uncertainty associated with the plan's longer-term continuation, as well as the specific exclusion of important Republic exports, we report EC MFN tariffs below. Laird and Yeats (1987, p. 95 show the EC GSP has only a modest impact on tariff levels, i.e., it reduces the average MFN duty on manufactures (excluding chemicals) from 8.1 to 6.4 percent.

supply. For example, FSU exports of undenatured ethyl alcohol face an EC tariff of 73.8 percent which is 42 percentage points higher than the average duty that developing countries pay on this product, and more than 30 percent higher than the average duty on all exporters combined. Approximately the same adverse tariff margin (41 percentage points) applies to exports of unfermented apple juice, and differentials of 15 percent or more occur on half of the tariff line products. For all manufactured goods combined, the 6.7 percent FSU tariff applied by the EC is more than twice as high as the average duty all exporters pay on these same products, and three times the corresponding rate facing developing countries. These adverse tariff margins, resulting from preferential trading arrangements like the EC's Lomé Convention, or the Community's Protocol with the EFTA for free trade in manufactures, allow other suppliers to displace (divert) potential FSU exports.

Several possibilities exist for rectifying this situation -- including the adoption of an FTA arrangement or extension of regional preferences to put the FSU region on an equal footing with other countries. This is all the more important because the match of trade and tariff data shows the adverse tariff differentials affect trade of all FSU republics. Assuming that the republics' exports were identical with those going to the EC, they would be affected by tariffs which were at least twice as high as the world average as follows: Russia--nine sectors accounting for at least 74 percent of its exports; Ukraine--six sectors accounting for at least 50 percent; Belarus--nine sectors accounting for at least 75 percent; Moldova--five sectors accounting for at least 17 percent; Estonia--six sectors accounting for at least 42 percent; Latvia--four sectors accounting for at least 16 percent; Lithuania--six sectors accounting for at least 55 percent; Armenia--six sectors accounting for at least 53 percent; Azerbaijan--eight sectors accounting for at least 89 percent; Georgia--eight sectors accounting for at least 81 percent of its exports; Kazakhstan--eight sectors accounting for at least 81 percent; Kyrgyzstan--eight sectors accounting for at least 86 percent; Tajikistan--eight sectors accounting for 99 percent; Turkmenistan--8 sectors accounting

for 95 percent and, Uzbekistan--9 sectors accounting for 91 percent of its exports.¹¹

V. Trade Barrier Escalation and FSU Commodity Exports

The previous section showed that a relatively high share of FSU exports to the OECD consists of unprocessed or semi-fabricated commodities, i.e., items in which the NISs could potentially experience important benefits from further processing.¹² However, studies have argued that trade barrier escalation in major international markets is an important constraint to further processing in commodity exporting countries (see Balassa, 1968, for an early statement of this point, or later studies by Helleiner and Welwood, 1978, and Yeats, 1979). Trade barrier escalation is characterized by zero, or very low, tariffs (and nontariff barriers) on unprocessed commodities but with these restrictions increasing with the degree of further processing, thus creating a bias against trade in processed commodities.

The concept of effective protection provides useful insights into the effects of escalating trade barriers over commodity processing chains (i.e., a processing chain identifies commodities at different stages of production with each successive stage representing a higher level of fabrication) in that it measures the influence of protection on value added in a production process (specifically, the effective rate shows the percentage reduction in value added foreign exporters of processed commodities must

¹¹ Because of their heavy reliance on ferrous metals and cotton products, the central Asian Republics (CAR) appear to be especially affected by the EC discriminatory tariffs. This observation must be qualified, however, since FSU trade data combine raw cotton (which is largely free of duties) with cotton textiles and clothing. We have been unable to determine the shares of these different types of goods in the reported total.

¹² The potential benefits may be of sufficient importance that some economists have argued that "natural resource based industrialization strategies" can provide a significant stimulus to overall industrialization and growth. Among the benefits cited are: avoidance of the purported deterioration in the terms of trade for primary commodities; increased employment opportunities associated with the production and export of manufactures; achievement of important linkages with other sectors of the economy; improvement of human capital through "learning effects"; and more stable prices of processed as opposed to primary commodities. See Roemer (1979) for a discussion of resource-based industrialization strategies.

absorb in order to compete in the protected market).¹³ The higher the effective rate of protection afforded by tariffs and other trade restraints, the more foreign exporters must reduce returns to domestic labor and capital. Thus, the effective protection concept provides insights about the effect that escalating tariffs (and NTBs) have on processing and trade. Previous empirical studies have shown that some low nominal tariffs, that appear to be unimportant may conceal high rates of effective protection.¹⁴

As previously noted, the FSU exported mainly energy, industrial inputs and low value added products for further processing. Since both enterprises and FTOs were indifferent to revenues generated by exports, there was no incentive to respond to higher tariffs by moving to less protected product groups. OECD effective protection is quite high in several sectors where the NISs (e.g., Armenia, the Baltic states, and Belarus) should be able to increase processing. For example, Table 6 indicates effective tariff rates range to more than eight times the nominal rate for such value added products as vegetable oils. In general, the effective tariff rates average over two times the corresponding nominal rate--indicating that OECD trade barriers have a far more restrictive effect on the location of processing activity than a superficial analysis of nominal rates suggests.

VI. Nontariff Barriers Facing FSU Exporters

While tariffs have often an adverse effect on FSU exports, in some sectors nontariff measures are even more formidable barriers. As an indication of their importance, Table 6 shows the share of individual FSU export products (individual products are identified here at the level of the importing countries' national tariff line) that encounter one or more nontariff barriers. Restrictions included in these tabulations are: quantitative ceilings on imports (including all Multifibre Arrangement

¹³Due to the importance attached to the issue, the World Bank identified processing chains for 49 individual commodities that are exported by developing countries in primary and processed forms. See the appendix to Yeats (1991) for details. All stages of these chains are defined in terms of the SITC system in order to facilitate analyses of international trade in these items.

¹⁴ For a non-technical discussion of the effective rate concept, see Grubel, (1971).

Table 6. Comparison of Nominal and Effective Rates of Tariff Protection for Selected Processed Commodities in OECD Countries

| <u>Processed Commodity</u> | <u>European Community</u> | | <u>Japan</u> | | <u>United States</u> | | <u>All OECD Countries</u> | |
|----------------------------|---------------------------|------------------|----------------|------------------|----------------------|------------------|---------------------------|------------------|
| | <u>Nominal</u> | <u>Effective</u> | <u>Nominal</u> | <u>Effective</u> | <u>Nominal</u> | <u>Effective</u> | <u>Nominal</u> | <u>Effective</u> |
| Processed meat products | 17.9 | 51.7 | 22.5 | 59.6 | 2.3 | 4.4 | 7.8 | 15.0 |
| Preserved sea foods | 12.4 | 26.5 | 10.7 | 23.2 | 1.1 | 2.5 | 1.7 | 3.7 |
| Preserved fruits | 16.6 | 40.8 | 21.8 | 31.6 | 20.3 | 72.5 | 17.6 | 43.4 |
| Preserved vegetables | 15.1 | 37.9 | 17.5 | 40.2 | 11.0 | 20.2 | 12.2 | 30.6 |
| Wood manufactures | 4.2 | 9.2 | 1.2 | 1.3 | 4.7 | 10.3 | 3.4 | 7.4 |
| Paper and paperboard | 6.0 | 5.5 | 3.6 | 13.7 | 3.8 | 0.7 | 2.5 | 4.3 |
| Articles of paper | 6.0 | 12.6 | 3.6 | 10.7 | 3.8 | 8.7 | 3.3 | 7.6 |
| Cotton fabrics | 5.6 | 11.8 | 5.9 | 10.0 | 10.4 | 13.5 | 8.5 | 11.0 |
| Wool fabrics | 2.7 | 5.1 | 11.0 | 25.3 | 37.3 | 85.8 | 14.6 | 34.0 |
| Leather manufactures | 5.5 | 9.9 | 12.4 | 18.6 | 9.2 | 17.5 | 7.6 | 13.7 |
| Vegetable oils | 6.1 | 50.6 | 6.2 | 49.6 | 0.7 | 0.0 | 4.5 | 36.1 |
| Ferrous metals | 2.2 | 5.0 | 2.3 | 5.1 | 5.3 | 11.8 | 4.6 | 9.2 |
| Nonferrous metals | 2.0 | 5.0 | 4.2 | 10.5 | 3.0 | 7.5 | 3.1 | 7.8 |

Source: Compiled from Laird and Yeats (1987, Table 15.4 on page 119). Some data were changed due to recent tariff changes.

(MFA) and other textile quotas; "voluntary" export restraints; product specific charges like antidumping and countervailing duties; restrictive licensing requirements; and variable import levies or "flexible" import fees. These tabulations were made for the same product groups used to analyze tariffs in order to indicate where the two types of restrictions are generally applied jointly (like foodstuffs), or separately (like wood furniture).¹⁵

With the exception of the United States, foods and animal feeds is one of the most NTB ridden product groups in OECD markets. Over three-quarters of FSU exports to Finland and Sweden encounter nontariff barriers, as do almost 70% of food exports to Japan. European Community NTBs are applied to 80 percent of FSU meat and sugar exports, and to slightly less than half of all fresh and preserved fruit products. The importance of these NTB statistics is accented by related studies showing they often reflect very high levels of nominal protection against foreign suppliers. For example, the UN Food and Agricultural Organization estimates the average level of protection for cereals, dairy, and sugar products in the EC and Japan ranges from 100 to 300 percent, while Laird and Yeats (1990, Chapter 5) indicate that variable import levies in Switzerland and Sweden, which are applied extensively to agricultural imports, often have ad valorem equivalents of over 100 percent.

As far as manufactures trade is concerned, the highest NTB coverage indices are recorded by the EC, Switzerland, and Sweden. Almost one-fifth of FSU exports to the EC face NTBs, with these restrictions largely concentrated in five sectors: leather and leather goods; textile yarn and fabrics; ferrous metals; clothing; and footwear. As was the case with foodstuffs, related studies affirm that very high levels of nominal protection are associated with these nontariff measures. A Laird and Yeats (1990, Chapter 5) survey suggests the (NTB-induced) level of EC protection for textiles and clothing lies between 30 and 50 percent, while that for ferrous metals is in the range of 20 to 30 percent. Hamilton

¹⁵An important problem associated with the analysis of NTBs is that these measures take very different forms from country-to-country and their trade effects or nominal equivalents are often very difficult to estimate (see Laird and Yeats, 1990 Chapter 2 for a detailed discussion of this point). As such, economists often rely on indices (like those presented in Table 9) that show product sectors within which nontariff barriers are most prevalent. See UNCTAD (1988) for a discussion of problems in the use and interpretation of NTB inventory data.

Table 7. Indices of NTB Application for Major Export Products of the Former Soviet Union

| Product Group (SITC) | 1991 | | | | | | |
|---|----------------------------------|--|---------|-------|--------|-------------|-------|
| | Total OECD Imports (\$ mill.) | Share of all tariff line products that face nontariff barriers (%) | | | | | |
| | | EEC(12) | Finland | Japan | Sweden | Switzerland | U.S.A |
| All Food Products (0 + 1 + 22 + 4) | 940 | 39 | 77 | 68 | 76 | 46 | 33 |
| Meat and live animals (01) | 3 | 80 | 100 | 33 | 50 | 8 | |
| Fresh and frozen fish (03) | 710 | 26 | 63 | 100 | 78 | -0 | 0 |
| Fresh and preserved fruit (051 to 053) | 56 | 47 | 55 | 0 | 100 | 6 | 0 |
| Sugar and preparations (06) | 16 | 80 | 100 | 0 | 0 | 100 | 0 |
| Animal Feeds (08) | 7 | 20 | 100 | 0 | | | |
| Beverages (11) | 59 | 46 | | 50 | 100 | 50 | 94 |
| Oilseeds and nuts (22) | 34 | 0 | 9 | | 100 | | 0 |
| Animal and vegetable oils (4) | 9 | 11 | 0 | 100 | 100 | 100 | |
| Agricultural Materials (2 - 22 - 27 - 28) | 2,115 | 26 | 0 | 23 | 7 | 20 | 6 |
| Wood and lumber (24) | 1,380 | 21 | 0 | 0 | 0 | 0 | 0 |
| Pulp and paper (25) | 125 | 0 | 0 | 0 | 0 | 0 | |
| Textile fibers (26) | 435 | 14 | 0 | 0 | | 0 | 13 |
| Ores, Minerals and Metals (27 + 28 + 68) | 4,022 | 3 | | 0 | 29 | 9 | 0 |
| Crude Fertilizer (271) | 51 | 0 | 0 | 0 | 50 | | |
| Metal ore and scrap (28) | 493 | 0 | 0 | 0 | 67 | 0 | 0 |
| Nonferrous metals (68) | 3,434 | 6 | 1 | 0 | 20 | 17 | 0 |
| All Manufactured goods (5 + 8 - 68) | 5,048 | 18 | 3 | 10 | 26 | 18 | 1 |
| Chemical elements (51) | 1,085 | 4 | 0 | 13 | 30 | 16 | 5 |
| Manufactured fertilizer (56) | 293 | 17 | 0 | 100 | | | 0 |
| Leather and goods (61) | 34 | 90 | 0 | 80 | 0 | 100 | 0 |
| Wood manufactures (63) | 132 | 0 | 0 | 0 | 0 | 0 | 0 |
| Textile yarn and fabric (65) | 112 | 93 | 0 | 38 | 71 | 67 | 20 |
| Ferrous metals (67) | 925 | 68 | 0 | 0 | 94 | 10 | 0 |
| Metal Manufactures (69) | 30 | 1 | 0 | 0 | 11 | 0 | 0 |
| Nonelectric machinery (71) | 254 | 0 | 0 | 0 | 0 | 6 | 0 |
| Electrical machinery (72) | 126 | 3 | 0 | 0 | 3 | 9 | 0 |
| Transport equipment (73) | 895 | 0 | 0 | 0 | 13 | 60 | 0 |
| Furniture (82) | 71 | 0 | 0 | 0 | 0 | 0 | 0 |
| Clothing (84) | 45 | 83 | 0 | 71 | 65 | 100 | 0 |
| Footwear (85) | 27 | 94 | 0 | 0 | 75 | | 0 |
| Scientific instruments (86) | 50 | 3 | 0 | 0 | 0 | 22 | 0 |
| Misc. Manufactures (89) | 167 | 17 | 0 | 2 | 19 | 7 | 0 |
| All non energy goods (0 to 9 -3) | 13,654 | 19 | 4 | 18 | 29 | 21 | 5 |
| All Goods (0 to 9) | 29,443 | 19 | 5 | 19 | 30 | 24 | 6 |

Source: OECD trade statistics from COMTRADE records. Tariff records from the SMART Data base. Blanks indicate that no trade occurred in the product group.

(1984 and 1986) estimates that EFTA's nontariff barrier protection for textiles and clothing is at least as high as that in the EC, and is probably somewhat higher for agriculture. In short, the message that emerges from Table 7 is that nontariff barriers (as well as tariffs) often constitute a major impediment to FSU exports and, in specific sectors, almost certainly will prevent any significant trade expansion.

VII. Trade Barriers Facing Individual Republics

In the medium term, as the NISs become more integrated into the world economy, their export baskets will evolve substantially reflecting reallocation of resources in line with their comparative advantage. In the short term, however, the FSU republics' production capacities probably will not change significantly. While raw materials and lightly-processed industrial products can probably be easily sold in international markets, some more highly processed manufactures--traded with other republics and "soft" trading areas (CMEA and some Third World countries)--which, as a rule, did not meet international quality standards could encounter problems. Yet, the significant redirection of manufacturing exports of Central European economies from the CMEA to EC markets cannot be entirely dismissed (Kaminski, 1993). Therefore, export capacities revealed in their 1990 trade could help identify products they will attempt to export.

Except for crude materials, many of these potential export products did not have easy access to Western markets, either because of the adverse tariff differentials associated with OECD preferences, and/or because of non-tariff barriers. In order to "quantify" the vulnerability of major (actual and potential) republic exports to EC trade barriers (the EC was selected given the overall importance of this market) products were first defined as "vulnerable" if one of the following conditions was met: (i) the EC MFN tariff on the FSU good was at least three times higher than the average facing other exporters, and (ii) the NTB coverage ratio for the group was at least 20% (i.e., one out of five tariff line level items was subject to non-tariff barriers). It is rather striking that 36 out of 47 export sectors fell into the vulnerable group. The sectors which did not fall into this group included ferrous

ores; non-ferrous ores; coal; coking products; perfume oils; silk products; electro-technical equipment; radio-electronics; shipbuilding; precision instruments; and other miscellaneous production. These sectors only accounted for more than 10% of exports of seven republics: Ukraine (17%), Moldova (13.2%), Estonia (12%), Latvia (37%), Lithuania (21%), and Armenia (22%).

In order to obtain a comprehensive assessment of the sensitivity of NIS exports to EC trade barriers, we employed the following three-step procedure. First, a concordance between the SITC (Rev. 1) and the 110-sector disaggregation used in Goskomstat estimates of inter-republic and extra-republic trade was established and then tariff rates and NTB coverage ratios were computed for each group using the World Bank-UNCTAD SMART data base. Next, we aggregated trade into two groups (vulnerable and non-vulnerable) using the criteria described earlier. The trade shares of these groups in both total inter- and extra-republic exports are given in columns "a" and "b" of Table 8. To assess the relative importance of the two types of barriers, the portion of FSU exports vulnerable to NTBs and tariffs are shown in (columns "c" and "d") while columns ("e" and "f") show the share of exports vulnerable to relatively high tariffs and columns ("g" and "h") provide similar information for nontariff barriers.

The key points evident from this table are as follows. First, many products which were both traded within the FSU and shipped to outside partners are highly vulnerable to EC trade barriers. The share of vulnerable products is high in the trade of all former republics and particularly so for most Asian NISs, especially from the CAR which is the least developed region of the FSU.¹⁶ Second, any

¹⁶The vulnerability of exporters of cotton products may be overstated, however, because the Soviet 110-sector breakdown lumps all cotton products together without distinguishing between their level of fabrication. In the above tabulations we treat them as final stage products (SITC. 65), although some of their exports may include primary stage products (e.g., raw cotton--SITC. 263) which are neither subject to non-tariff barriers nor to higher tariff rates in most OECD countries. Since the FSU exported to the OECD mainly raw cotton (its share was around 35% of all 1990 shipments of cotton product), one may suspect that almost 100% of exports originating in the CAR was raw cotton rather than NTB-ridden cotton products. Recalculating the shares of exports from the CAR subject to either discriminatory tariffs or NTBs (see Table 10) yields the following results: for Kyrgyzstan the inter-republic and extra-republic share falls to 73% and 91%, respectively; for Tajikistan to 74% and 81%; for Turkmenistan to 79% and 33%; and for Uzbekistan to 68% and 40%. This is clearly not the case of many European NISs--highly vulnerable to EC trade barriers--which, because of geographical proximity, could be competitive in EC markets. The coverage is very high, especially for Belarus and Moldova.

Table 8. Share of Potential Exports from the NIS Vulnerable to EC Trade Barriers (percent)

| | Share of Exports subject to | | | | | | | |
|--------------|-----------------------------|------------|----------------|------------|--------------------|------------|------------|------------|
| | NTBs and/or | | both NTBs and | | Nontariff Barriers | | Tariffs | |
| | Higher Tariffs | | Higher Tariffs | | | | | |
| | Inter-rep. | Extra-rep. | Inter-rep. | Extra-rep. | Inter-rep. | Extra-rep. | Inter-rep. | Extra-rep. |
| | (a) | (b) | (c) | (d) | (e) | (f) | (g) | (h) |
| Armenia | 64 | 71 | 25 | 11 | 5 | 9 | 37 | 55 |
| Azerbaijan | 93 | 95 | 13 | 8 | 14 | 10 | 75 | 85 |
| Georgia | 79 | 93 | 30 | 19 | 30 | 22 | 46 | 82 |
| Estonia | 84 | 73 | 19 | 16 | 25 | 44 | 39 | 25 |
| Latvia | 70 | 57 | 13 | 8 | 14 | 22 | 48 | 33 |
| Lithuania | 69 | 77 | 11 | 3 | 13 | 10 | 42 | 66 |
| Belarus | 83 | 90 | 8 | 3 | 6 | 3 | 73 | 87 |
| Moldova | 82 | 85 | 22 | 15 | 22 | 27 | 46 | 24 |
| Russia | 71 | 70 | 10 | 4 | 10 | 6 | 65 | 66 |
| Ukraine | 80 | 76 | 21 | 16 | 25 | 18 | 68 | 62 |
| Kazakhstan | 64 | 90 | 23 | 28 | 14 | 27 | 42 | 81 |
| Kyrgyzstan | 75 | 95 | 10 | 4 | 13 | 8 | 55 | 86 |
| Tajikistan | 91 | 99 | 26 | 18 | 28 | 19 | 52 | 80 |
| Turkmenistan | 97 | 98 | 21 | 68 | 22 | 70 | 69 | 28 |
| Uzbekistan | 88 | 96 | 26 | 56 | 24 | 57 | 58 | 39 |
| FSU ALL | 75 | 73 | 14 | 7 | 14 | 9 | 63 | 66 |

Source: Based on the 1990 Goskomstat inter-and extra-republic trade data and data on tariffs and NTBs compiled from SMART.

attempt to redirect inter-republic exports to the EC would be constrained by substantial trade barriers. As an illustration, for a significant number of the NISs the coverage ratios for what was inter-republic trade are higher than those for extra-republic trade, especially so for Estonia, Latvia, Russia, and Ukraine. As a result, without any improvement in their access to Western markets, limited prospects exist for a significant redirection of exports.

VIII. Concluding Comments

The FSU was outside the extensive OECD trade preference system which differentiated market access according to the source of supply. Its exports faced the highest tariff rates and were subject to quantitative restrictions going beyond those imposed on most other trading partners. In EC markets, it had to compete on unequal footing with other highly industrialized European countries, since the latter, members of the EFTA, had preferential access. Its exports to the United States were discriminated against, simply because the FSU did not have MFN status.

While one may argue that access to OECD markets was of no particular relevance for the Soviet central planners, it has become critical for most successor states of the FSU. The FSU's major foreign currency earners--oil and gas, ores, minerals, and non-ferrous metals--were not particularly vulnerable to trade barriers. As a result, there was little incentive to expand other exports -- most of them in short supply at home. For instance, the utilization rates of EC quotas by CMEA countries were low and, on the whole, quotas were not binding (Schumacher and Mobius, 1992:8, and Rodrik, 1992). Producers in the former republics, divorced from international markets by the state monopoly of foreign trade, were indifferent whether their products were shipped abroad or consumed at home. Now, however, regardless of differences among the NISs in terms of size and GDP per capita, they all face the challenge to establish viable economies integrated into the world economy. Most of these new economies are extremely dependent on foreign trade, both with the former republics and with other countries,

especially in the OECD.

Yet, the period following the dissolution of the FSU has not witnessed a substantial improvement in their market access. The United States has granted MFN status (excluding Azerbaijan), but for the European NISs the United States is not, and is not likely to become, their major market. The EC has recently signed the Agreements on Trade, Commercial and Economic Cooperation with the Baltic states and also extended GSP treatment to some selected products on a "temporary" basis. Moreover, it promises negotiation of higher quotas for textiles and clothing. However, the Agreements do not cover some products in which the Baltic states are potentially competitive, i.e., agricultural and steel products, and GSP specifically excludes textiles and clothing along with fishery products. For the immediate future, the joint Baltic states/EFTA declaration paving the way for a free trade zone for manufactured goods strikes one as potentially more significant, because the EFTA is an important trading partner.

Because of geographical proximity and the existing transportation network, the most important trading partners within the OECD for most NISs is the EC. The present EC arrangements put the NISs on the same footing as high-income countries (such as Australia, Japan, United States, etc.), which means that they face restricted access to EC markets. Their products are subject to higher tariffs and more restraining non-tariff barriers than those encountered by EFTA members, Mediterranean and Lomé Convention signatories, and former European CMEA-members. Thanks to the European Association Agreements signed with the EC, exports of manufactures from the Czech Republic, Hungary, Poland, Romania and Slovakia are either duty-free or subject to much lower tariff rates than levied on most other exporters. Because of similar industrialization strategies pursued under central planning, European NISs and Central/Southern European countries are likely to compete in the same markets. The lower wage rates in many NISs may not be sufficient to compensate for their generally lower productivity and losses in value added (because of higher tariff rates that importers would have to pay on these imports) that exporters have to absorb in order to compete effectively in protected markets.

The NISs' vulnerability to various OECD preferential arrangements--determined by their export baskets--vary among successor states. Those with export profiles leaning towards agricultural products (including agricultural raw materials) face significant NTBs in all major OECD countries, except for the United States. Food and feeds is one of the most NTB-ridden product groups. Exporters from the Baltic states and Moldova encounter widespread non-tariff barriers in the EC, Japan, Finland and Sweden (NTBs are applied to between 70 and 80 percent of FSU exports to these markets). While the share of food in total FSU exports was well below 10 percent, the share in external exports in these former republics often exceeded 20 percent. In addition, Ukraine clearly has the potential to become an important net exporter of agricultural products (its contribution to external agricultural exports was significantly lower than its share in internal exports).

Not more encouraging are prospects for exporters of manufactures. All NISs share the socialist legacy of a strategy of industrialization which focused on the development of the so-called heavy industries (steel, basic chemicals, etc.) characteristic of the Second Industrial Revolution. With the exclusion of the military sector, the Soviet economy was unable to absorb the modern technologies associated with the Third Industrial Revolution. Because of firmly entrenched vested interests, the markets for these products in the OECD economies tend to be more highly protected than others. Thus, for instance, according to a recent study (Schumacher and Mobius, 1992), among sectors in the former European CMEA regarded as highly affected by the EC trade policy measures in 1990 one finds iron and steel industries, steel tubes, non-ferrous metals, basic chemicals, yarns, rubber products, and petrochemical industries. A quick examination of major external export industries of the NISs in Table 4 shows that they are also of significance for the former republics. For instance, iron and steel producers were among the top ten exporters in Azerbaijan, Georgia, Kazakhstan, Moldova, Russia and Ukraine, and basic chemicals producers were among the top ten export performers in nine NISs. In all, manufactured goods originating in the FSU face tariffs more than twice as high as the average duties all

other exporters pay on the same products, and three times as high as exporters from developing countries pay.

Thus, the key sectors--outside of energy and industrial raw materials--in which the NISs are potentially competitive are practically exempted from OECD markets or face higher restrictions than countries at a similar level of economic development. Significant export expansion is not likely to take place unless some measures are implemented that would put the NISs on equal footing with other countries.

Finally, considerations of market access affect foreign direct investment: trade barriers in external markets make more difficult or may rule out the export option and therefore increase the risk factor associated with investments. Thus, the flow of foreign direct investment--important not only to increased capital formation but also to increased efficiency of domestic firms through the "demonstration effect" of good management practices and work habits--is likely to be adversely affected.

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STATISTICAL APPENDIX

Appendix Table 1. Tariffs and Nontariff Barriers Facing Former Soviet Union Manufactures Exports to OECD Europe and Japan

| SITC | Description | 1991 OECD imports (\$000) | Share of OECD imports (%) | | European Community | | Japan | | Sweden | | United States | |
|------|-------------------------------|------------------------------|---------------------------|-------------------------|-----------------------|------------------|-----------------------|------------------|-----------------------|------------------|-----------------------|------------------|
| | | | All Manufactures | All Non Oil Products | Average Tariff (%) | NTB Ratio (%) | Average Tariff (%) | NTB Ratio (%) | Average Tariff (%) | NTB Ratio (%) | Average Tariff (%) | NTB Ratio (%) |
| 667 | Pearls and precious stones | 595,591 | 11.8 | 4.4 | 0.7 | 0 | 0.6 | 0 | — | — | 6.0 | 0 |
| 732 | Road motor vehicles | 534,003 | 10.6 | 3.9 | 8.8 | 0 | 3.3 | 0 | 6.0 | 16 | 0.6 | 0 |
| 671 | Pig iron and ferro-alloys | 533,300 | 10.6 | 3.9 | 4.8 | 96 | 4.7 | 0 | 0.1 | 90 | 0.0 | 0 |
| 515 | Radioactive materials | 373,013 | 7.4 | 2.7 | 3.8 | 0 | 3.7 | 0 | 0.0 | 0 | 0.6 | 0 |
| 512 | Organic chemicals | 346,864 | 6.9 | 2.5 | 9.6 | 0 | 5.4 | 38 | 3.2 | 56 | 5.1 | 17 |
| 513 | Inorganic elements | 319,072 | 6.3 | 2.3 | 6.6 | 14 | 4.6 | 0 | 0.0 | 20 | 2.0 | 0 |
| 672 | Steel ingots | 306,818 | 6.1 | 2.2 | 4.2 | 86 | 4.9 | 0 | — | — | 4.7 | 0 |
| 561 | Manufactured fertilizers | 293,174 | 5.8 | 2.1 | 6.5 | 17 | 0.0 | 100 | — | — | 0.0 | 0 |
| 735 | Ships and boats | 159,006 | 3.1 | 1.2 | 1.1 | 0 | 3 | 0 | — | — | — | — |
| 734 | Aircraft | 125,900 | 2.5 | 0.9 | 2.5 | 0 | 6.1 | 0 | 0.0 | 0 | 2.5 | 0 |
| 631 | Plywood and veneers | 120,981 | 2.4 | 0.9 | 8.3 | 0 | 0.0 | 0 | 2.3 | 0 | 5.6 | 0 |
| 896 | Works of art and antiques | 120,055 | 2.4 | 0.9 | 0.0 | 17 | 0.0 | 17 | 0.0 | 0 | 0 | 0 |
| 711 | Power generating machinery | 77,843 | 1.5 | 0.6 | 6.1 | 0 | 1.5 | 0 | 3.8 | 0 | 3.2 | 0 |
| 821 | Furniture | 71,116 | 1.4 | 0.5 | 5.7 | 0 | 4.8 | 0 | 3.8 | 0 | 3.7 | 0 |
| 725 | Domestic electrical equipment | 57,976 | 1.1 | 0.4 | 4.6 | 14 | — | — | 3.8 | 0 | 5.3 | 0 |
| 731 | Railway vehicles | 55,472 | 1.1 | 0.4 | 4.8 | 0 | 4.9 | 0 | 3.2 | 0 | — | — |
| 641 | Paper and paper board | 54,961 | 1.1 | 0.4 | 8.3 | 13 | 4.7 | 0 | 1.2 | 67 | 3.0 | 0 |
| 719 | Machinery n.e.s. | 53,815 | 1.1 | 0.4 | 4.6 | 0 | 3.7 | 0 | 3.7 | 0 | 4.1 | 0 |
| 715 | Metalworking machinery | 49,549 | 1.0 | 0.4 | 4.2 | 0 | 1.6 | 0 | 3.1 | 0 | 4.3 | 0 |
| 514 | Other inorganic chemicals | 46,431 | 0.9 | 0.3 | 8.0 | 9 | 4.7 | 0 | 0.6 | 0 | 1.1 | 0 |
| 841 | Clothing | 42,476 | 0.8 | 0.3 | 12.9 | 86 | 12 | 0 | 12.6 | 69 | 12.5 | 0 |
| 599 | Chemical materials n.e.s. | 40,982 | 0.8 | 0.3 | 5.9 | 7 | 2.1 | 40 | 3.6 | 10 | 0.1 | 0 |
| 712 | Agricultural machinery | 36,367 | 0.7 | 0.3 | 5.9 | 0 | 0.0 | 0 | 4.0 | 0 | 0.0 | 0 |
| 861 | Scientific apparatus | 33,321 | 0.7 | 0.2 | 6.2 | 2 | 3.5 | 0 | 2.5 | 0 | 3.9 | 0 |
| 674 | Iron and steel plates | 32,581 | 0.6 | 0.2 | 4.8 | 100 | 4.9 | 0 | 5.0 | 100 | — | — |
| 718 | Machines for special industry | 28,393 | 0.6 | 0.2 | 3.8 | 0 | — | — | — | — | 3.3 | 0 |
| 673 | Iron and steel bars | 28,272 | 0.6 | 0.2 | 5.4 | 60 | 5.8 | 0 | 5.0 | 100 | — | — |
| 611 | Leather | 26,782 | 0.5 | 0.2 | 5.9 | 100 | — | — | 4.4 | 0 | — | — |
| 851 | Footwear | 26,881 | 0.5 | 0.2 | 9.8 | 94 | 0.0 | 0 | 11.1 | 75 | 9.3 | 0 |
| 657 | Floor coverings | 23,007 | 0.5 | 0.2 | 7.9 | 100 | 12.0 | 0 | 4.0 | 33 | 4.8 | 0 |
| 722 | Electric power machinery | 22,726 | 0.5 | 0.2 | 5.0 | 7 | 4.1 | 0 | 4.2 | 10 | 5.0 | 0 |
| 724 | Telecommunications apparatus | 18,658 | 0.4 | 0.1 | 8.5 | 0 | 1.3 | 0 | — | — | — | — |
| 729 | Other electrical machinery | 18,400 | 0.4 | 0.1 | 7.2 | 0 | 1.7 | 0 | 3.4 | 0 | 2.9 | 0 |
| 653 | Woven textile fabrics | 15,326 | 0.3 | 0.1 | 12 | 97 | 10.0 | 100 | 12.6 | 86 | — | — |
| 864 | Watches and clocks | 14,374 | 0.3 | 0.1 | 5.6 | 7 | 5.5 | 0 | 3.5 | 0 | 6.2 | 0 |
| 581 | Plastic materials | 13,104 | 0.3 | 0.1 | 10.6 | 6 | 9.2 | 0 | 9.0 | 100 | 2.9 | 0 |
| 656 | Made-up textile articles | 12,302 | 0.2 | 0.1 | 11.5 | 100 | 11.6 | 0 | 12.7 | 89 | 11.5 | 0 |
| 894 | Toys and sporting goods | 12,195 | 0.2 | 0.1 | 7.2 | 24 | 4.7 | 0 | 3.8 | 0 | 7.4 | 0 |
| 541 | Medicinal products | 11,153 | 0.2 | 0.0 | 6.5 | 0 | 5.0 | 50 | — | — | — | — |
| 678 | Iron and steel tubes | 11,027 | 0.2 | 0.0 | 9.2 | 13 | 6.5 | 0 | — | — | — | — |
| 632 | Wood manufactures, n.e.s. | 10,844 | 0.2 | 0.1 | 5.3 | 0 | 4.9 | 0 | 3.8 | 0 | 5.2 | 0 |
| 661 | Lime and cement | 10,675 | 0.2 | 0.1 | 3.6 | 0 | 4.2 | 0 | 0.6 | 100 | — | — |
| 897 | Jewellery and gold wares | 10,476 | 0.2 | 0.1 | 5.3 | 17 | 8.1 | 0 | 3.8 | 0 | 8.9 | 0 |

Note: Metallic ores, minerals and nonferrous metals comprise all items in SITC groups 27, 28 and 68. Statistics for the EC show average MFN rates.

Appendix Table 2. Tariffs and Nontariff Barriers Facing Former Soviet Union Agricultural Products to OECD Europe and Japan

| SITC | Description | 1991 OECD imports (\$000) | Share of OECD imports (%) | | European Community | | Japan | | Sweden | | United States | |
|------|--------------------------------|------------------------------|---------------------------|--------------|--------------------|-----------|------------|-----------|------------|-----------|---------------|-----------|
| | | | All | All Non | Average | NTB | Average | NTB | Average | NTB | Average | NTB |
| | | | Manufactures | Oil Products | Tariff (%) | Ratio (%) | Tariff (%) | Ratio (%) | Tariff (%) | Ratio (%) | Tariff (%) | Ratio (%) |
| 243 | Wood shaped or simply worked | 7,226,532 | 23.8 | 5.3 | 2.0 | 0 | 4.7 | 0 | 0.0 | 0 | 0.0 | 0 |
| 242 | Wood in the rough | 648,619 | 21.2 | 4.8 | 0.0 | 100 | 0.0 | 0 | 0.0 | 0 | -- | -- |
| 031 | Fish fresh or simply preserved | 600,785 | 19.7 | 4.4 | 13.3 | 37 | 6.1 | 100 | 0.0 | 0 | 3.6 | 0 |
| 263 | Cotton | 398,750 | 13.1 | 2.9 | 0.2 | 14 | 0.0 | 0 | -- | -- | 1.4 | 100 |
| 251 | Pulp and waste paper | 124,855 | 4.1 | 0.9 | 0.0 | 0 | 2.2 | 0 | 0.0 | 0 | -- | -- |
| 032 | Fish in containers | 109,650 | 3.6 | 0.8 | 19.8 | 7 | 11.9 | 100 | 2.1 | 60 | 7.5 | 0 |
| 211 | Leaves and skins | 68,409 | 2.2 | 0.5 | 0.0 | 92 | 0.0 | 0 | 0.0 | 0 | 0.0 | 0 |
| 112 | Alcoholic beverages | 59,004 | 1.9 | 0.4 | 14.9 | 50 | 51.7 | 0 | 1.9 | 100 | 15.0 | 100 |
| 053 | Preserved Fruit | 43,418 | 1.4 | 0.3 | 22.1 | 68 | 25.0 | 0 | 0.0 | 100 | 18.1 | 0 |
| 221 | Oil seeds and nuts | 34,125 | 1.1 | 0.2 | 0.0 | 0 | -- | -- | 0.0 | 100 | 0.1 | 0 |
| 231 | Crude rubber (incl. synthetic) | 33,216 | 1.1 | 0.2 | 0.3 | 0 | 0.0 | 0 | 0.0 | 0 | 0.0 | 0 |
| 212 | Fur skins, undressed | 27,292 | 0.9 | 0.2 | 0.0 | 60 | 7.3 | 100 | 0.0 | 0 | 0.0 | 0 |
| 061 | Sugar and honey | 16,218 | 0.5 | 0.1 | 27.0 | 0 | 30.0 | 0 | 3.0 | 0 | 2.7 | 0 |
| 054 | Fresh and frozen vegetables | 15,167 | 0.5 | 0.1 | 7.9 | 29 | 12.5 | 50 | 12.8 | 100 | 0.5 | 0 |
| 262 | Wool and animal hair | 14,384 | 0.5 | 0.1 | 0.3 | 20 | 0.0 | 0 | 0.0 | 0 | 3.1 | 0 |
| 051 | Fresh fruit and nuts | 12,042 | 0.4 | 0.1 | 3.0 | 0 | 20.0 | 0 | 0.0 | 100 | -- | -- |
| 261 | Silk | 10,938 | 0.4 | 0.1 | 0.0 | 0 | 0.0 | 0 | -- | -- | -- | -- |
| 266 | Synthetic fibers | 8,697 | 0.3 | 0.1 | 7.7 | 18 | 8.7 | 0 | -- | -- | -- | -- |
| 001 | Live animals | 8,437 | 0.3 | 0.1 | 5.5 | 67 | 0.0 | 100 | 0.0 | 67 | 1.3 | 0 |
| 081 | Animal feeds | 7,240 | 0.2 | 0.1 | 0.8 | 20 | 0.0 | 0 | 0.0 | 0 | -- | -- |
| 025 | Eggs | 5,670 | 0.2 | -- | 0.0 | 0 | -- | -- | -- | -- | -- | -- |
| 022 | Milk and cream | 5,309 | 0.2 | -- | 0.0 | 100 | -- | -- | -- | -- | -- | -- |
| 411 | Animal oils and fats | 4,497 | 0.1 | -- | 2.5 | 0 | 10.0 | 100 | -- | -- | -- | -- |
| 241 | Fuel wood and charcoal | 4,453 | 0.1 | -- | 0.0 | 0 | -- | -- | 0.0 | 0 | -- | -- |
| 042 | Rice | 4,361 | 0.1 | -- | 0.0 | 0 | -- | -- | -- | -- | -- | -- |
| 421 | Fixed vegetable oils | 3,584 | 0.1 | -- | 13.3 | 25 | -- | -- | 0.0 | 100 | -- | -- |
| 055 | Vegetable roots and tubers | 3,437 | 0.1 | -- | 18.7 | 11 | 15.0 | 0 | 6.0 | 33 | 14.2 | 0 |
| 265 | Vegetable fibers except cotton | 1,284 | -- | -- | 0.0 | 0 | -- | -- | -- | -- | 0.0 | 0 |
| 052 | Dried fruit | 678 | -- | -- | 4.5 | 50 | -- | -- | 0.0 | 100 | -- | -- |
| 267 | Textile waste materials | 643 | -- | -- | 0.4 | 0 | -- | -- | -- | -- | 1.8 | 0 |

Note: Agricultural products comprise foods, feeds and raw materials (SITC 0 + 1 + 4 less 27 and 28). Statistics for the EC show average MFN rates.

Appendix Table 3. Tariffs and Nontariff Barriers Facing Former Soviet Union Ores and Metals to OECD Europe and Japan

| SITC | Description | 1991 OECD imports (\$000) | Share of OECD imports (%) | | European Community | | Japan | | Sweden | | United States | |
|------|---|------------------------------|---------------------------|-------------------------|-----------------------|------------------|-----------------------|------------------|-----------------------|------------------|-----------------------|------------------|
| | | | All Manufactures | All Non Oil Products | Average Tariff (%) | NTB Ratio (%) | Average Tariff (%) | NTB Ratio (%) | Average Tariff (%) | NTB Ratio (%) | Average Tariff (%) | NTB Ratio (%) |
| 681 | Silver and platinum | 1,327,640 | 33.0 | 9.7 | 8.0 | 0 | 0.4 | 0 | 0.0 | 0 | 0.0 | 0 |
| 684 | Aluminum | 718,172 | 17.9 | 5.3 | 1.9 | 0 | 4.5 | 0 | 0.1 | 50 | 0.0 | 0 |
| 683 | Nickel | 706,923 | 17.6 | 5.2 | 2.1 | 0 | 5.5 | 0 | 0.0 | 0 | — | — |
| 682 | Copper | 554,326 | 13.8 | 4.1 | 1.9 | 0 | 6.5 | 0 | 0.0 | 0 | 1.0 | 0 |
| 283 | Ores of nonferrous metals | 118,561 | 2.9 | 0.9 | 0.0 | 0 | 0.0 | 0 | — | — | 0.0 | — |
| 281 | Iron ore and concentrates | 114,012 | 2.9 | 0.8 | 0.0 | 0 | — | — | — | — | — | — |
| 284 | Non-ferrous metal scrap | 113,227 | 2.9 | 0.8 | 0.5 | 0 | 0.0 | 0 | 0.0 | 0 | 0.0 | 0 |
| 282 | Iron and steel scrap | 96,298 | 2.4 | 0.7 | 0.0 | 0 | 0.0 | 0 | 0.0 | 100 | — | — |
| 689 | Misc. nonferrous base metals | 85,206 | 2.1 | 0.6 | 5.1 | 17 | 5.8 | 0 | 0.0 | 0 | 2.0 | 0 |
| 271 | Crude fertilizers | 50,664 | 1.3 | 0.4 | 0.0 | 0 | — | — | 0.0 | 50 | — | — |
| 286 | Uranium and thorium ores | 46,044 | 1.1 | 0.3 | 0.0 | 0 | — | — | — | — | — | — |
| 276 | Crude minerals (chalk, graphite, etc.) | 32,333 | 0.8 | 0.2 | 1.1 | 0 | 0.0 | 0 | 0.0 | 0 | 0.0 | 0 |
| 685 | Lead | 22,748 | 0.6 | 0.2 | 3.5 | 0 | 9.1 | 0 | — | — | — | — |
| 686 | Zinc | 16,605 | 0.4 | 0.1 | 8.0 | 0 | 9.1 | — | — | — | — | — |
| 275 | Natural abrasives & industrial diamonds | 7,174 | 0.2 | 0.1 | 0.9 | 0 | 0.0 | 0 | — | — | 0.0 | 0 |
| 285 | Silver and platinum ores | 4,510 | 0.1 | — | 0.0 | 0 | — | — | — | — | 1.2 | 0 |
| 273 | Stone, sand and gravel | 2,934 | 0.1 | — | 0.0 | 0 | 0.0 | 0 | — | — | — | — |
| 274 | Sulphur and iron pyrites | 2,506 | 0.1 | — | 0.0 | 0 | — | — | — | — | — | — |
| 688 | Uranium and thorium | 2,126 | 0.1 | — | 5.1 | 23 | 5.4 | 0 | — | — | 2.0 | 0 |

Note: Metallic ores, minerals and nonferrous metals comprise all items in SITC groups 27, 28 and 68. Statistics for the EC show average MFN rates.

Appendix Table 4. Share of Republics in FSU Exports, by Major Product Category, in 1990

| | Agricultural Products (SITC.0+1+22+4) | Raw Materials, Ores and Metals (SITC.2-22,68) | Mineral fuels, etc. (SITC.3) | Manufactures (SITC.5 +6+7+8-68) | Share in Total |
|--------------|--|--|---------------------------------|------------------------------------|----------------|
| | (in percent) | | | | |
| Armenia | 0.27 | 0.08 | 0.00 | 0.20 | 0.11 |
| Azerbaijan | 0.81 | 0.03 | 1.08 | 0.54 | 0.70 |
| Georgia | 1.56 | 0.17 | 0.58 | 0.47 | 0.50 |
| Estonia | 2.79 | 0.04 | 0.06 | 0.23 | 0.19 |
| Latvia | 2.14 | 0.10 | 0.00 | 0.49 | 0.28 |
| Lithuania | 2.30 | 0.14 | 0.67 | 0.71 | 0.66 |
| Belarus | 1.81 | 0.32 | 2.37 | 5.10 | 3.36 |
| Moldova | 3.28 | 0.02 | 0.36 | 0.38 | 0.40 |
| Russia | 62.10 | 78.75 | 86.87 | 68.30 | 76.95 |
| Ukraine | 18.81 | 7.91 | 7.63 | 18.54 | 1.74 |
| Kazakhstan | 2.59 | 7.46 | 0.23 | 1.60 | 0.09 |
| Kyrgyzstan | 0.26 | 0.47 | 0.00 | 0.06 | 0.60 |
| Tajikistan | 0.17 | 4.08 | 0.00 | 0.27 | 0.18 |
| Turkmenistan | 0.19 | 0.00 | 0.09 | 0.31 | 12.87 |
| Uzbekistan | 0.93 | 0.44 | 0.05 | 2.79 | 1.36 |
| FSU ALL | 100.0 | 100.0 | 100.0 | 100.0 | 100.0 |

Source: World Bank data.

Appendix Table 5. Direction of Exports of the FSU, by Republics in 1990

| (a) shares of republics in total exports of the Soviet Union, by major trading partners | | | | | | | | | | | | | | | |
|---|--------|---------|---------|---------|---------|--------|---------|---------|---------|--------|-----------|-----------|--------|--------|--------|
| Republic | World | OECD | EC (12) | France | Germany | UK | EFTA | Austria | Finland | Sweden | CMEA | Euro-CMEA | Other | India | China |
| Russia | 75.7% | 76.2% | 76.3% | 76.1% | 75.8% | 76.4% | 75.7% | 75.8% | 76.8% | 75.0% | 76.2% | 76.3% | 72.7% | 76.2% | 76.2% |
| Belarus | 4.3% | 4.1% | 4.1% | 4.2% | 4.2% | 4.1% | 4.0% | 3.8% | 4.1% | 4.5% | 4.4% | 4.5% | 4.2% | 4.2% | 3.4% |
| Ukraine | 13.2% | 12.4% | 12.8% | 12.9% | 13.1% | 12.9% | 11.6% | 11.1% | 11.0% | 12.4% | 13.4% | 13.6% | 14.7% | 12.1% | 11.3% |
| Moldova | 0.4% | 0.3% | 0.3% | 0.2% | 0.3% | 0.3% | 0.2% | 0.7% | 0.2% | 0.0% | 0.5% | 0.6% | 0.3% | 0.3% | 0.3% |
| Armenia | 0.2% | 0.1% | 0.1% | 0.2% | 0.2% | 0.2% | 0.1% | 0.2% | 0.2% | 0.0% | 0.2% | 0.2% | 0.1% | 0.2% | 0.1% |
| Azerbaijan | 0.7% | 0.8% | 0.7% | 0.7% | 0.7% | 0.8% | 1.4% | 1.3% | 0.6% | 0.8% | 0.6% | 0.6% | 0.9% | 0.8% | 0.6% |
| Georgia | 0.5% | 0.5% | 0.5% | 0.5% | 0.5% | 0.5% | 0.4% | 1.1% | 0.4% | 0.0% | 0.4% | 0.4% | 0.5% | 0.5% | 0.4% |
| Kazakhstan | 1.7% | 1.8% | 1.7% | 1.8% | 1.8% | 1.8% | 1.5% | 1.8% | 1.6% | 1.4% | 1.4% | 1.4% | 2.3% | 2.0% | 2.8% |
| Kyrgyzstan | 0.1% | 0.1% | 0.1% | 0.0% | 0.1% | 0.1% | 0.1% | 0.1% | 0.1% | 0.1% | 0.1% | 0.1% | 0.3% | 0.1% | 0.7% |
| Tajikistan | 0.6% | 0.6% | 0.6% | 0.7% | 0.7% | 0.7% | 0.6% | 0.7% | 0.7% | 0.2% | 0.5% | 0.5% | 0.8% | 0.7% | 0.7% |
| Turkmenistan | 0.2% | 0.2% | 0.2% | 0.2% | 0.2% | 0.1% | 0.2% | 0.2% | 0.2% | 0.0% | 0.2% | 0.2% | 0.3% | 0.3% | 0.3% |
| Uzbekistan | 1.4% | 1.6% | 1.4% | 1.5% | 1.4% | 1.4% | 1.1% | 1.5% | 1.2% | 0.8% | 1.1% | 1.1% | 1.8% | 1.7% | 2.1% |
| Estonia | 0.2% | 0.2% | 0.1% | 0.1% | 0.2% | 0.1% | 0.8% | 0.1% | 1.1% | 1.0% | 0.1% | 0.1% | 0.1% | 0.2% | 0.1% |
| Latvia | 0.2% | 0.4% | 0.3% | 0.1% | 0.2% | 0.1% | 0.9% | 1.1% | 0.7% | 1.9% | 0.1% | 0.1% | 0.2% | 0.2% | 0.3% |
| Lithuania | 0.6% | 0.7% | 0.6% | 0.7% | 0.7% | 0.7% | 1.3% | 0.5% | 1.3% | 1.9% | 0.5% | 0.5% | 0.5% | 0.7% | 0.7% |
| TOTAL-FSU | 100.0% | 100.0% | 100.0% | 100.0% | 100.0% | 100.0% | 100.0% | 100.0% | 100.0% | 100.0% | 100.0% | 100.0% | 100.0% | 100.0% | 100.0% |
| (b) shares of major trading partners in republic total exports | | | | | | | | | | | | | | | |
| Republic | OECD | EC (12) | France | Germany | UK | EFTA | Austria | Finland | Sweden | CMEA | Euro-CMEA | OTHER | India | China | |
| Russia | 39.0% | 29.4% | 2.9% | 12.2% | 3.3% | 5.9% | 1.0% | 3.2% | 0.8% | 46.1% | 36.4% | 14.9% | 2.1% | 2.4% | |
| Belarus | 37.0% | 28.0% | 2.8% | 12.1% | 3.2% | 5.6% | 0.9% | 3.1% | 0.9% | 47.6% | 38.2% | 15.4% | 2.1% | 1.9% | |
| Ukraine | 36.2% | 28.3% | 2.8% | 12.1% | 3.2% | 5.2% | 0.8% | 2.6% | 0.8% | 46.6% | 37.1% | 17.2% | 1.9% | 2.1% | |
| Moldova | 27.9% | 22.2% | 1.7% | 10.2% | 2.1% | 3.4% | 1.7% | 1.3% | 0.0% | 59.3% | 48.2% | 12.8% | 1.3% | 1.7% | |
| Armenia | 34.6% | 27.3% | 3.3% | 12.3% | 3.3% | 4.9% | 1.1% | 3.3% | 0.0% | 51.6% | 42.4% | 13.8% | 2.2% | 2.2% | |
| Azerbaijan | 42.8% | 27.3% | 2.9% | 12.0% | 3.4% | 11.5% | 1.7% | 2.5% | 1.0% | 38.8% | 28.7% | 18.4% | 2.2% | 2.0% | |
| Georgia | 42.1% | 31.1% | 3.0% | 12.0% | 3.4% | 5.3% | 2.3% | 2.6% | 0.0% | 40.9% | 31.2% | 17.0% | 2.3% | 2.3% | |
| Kazakhstan | 40.1% | 29.8% | 3.1% | 12.6% | 3.5% | 5.2% | 1.0% | 2.9% | 0.7% | 38.9% | 28.9% | 21.0% | 2.5% | 4.0% | |
| Kyrgyzstan | 33.8% | 28.3% | 1.2% | 8.9% | 1.5% | 3.1% | 0.9% | 1.5% | 0.7% | 29.6% | 22.2% | 36.6% | 1.5% | 14.8% | |
| Tajikistan | 40.1% | 29.5% | 3.1% | 13.1% | 3.7% | 5.4% | 1.1% | 3.4% | 0.3% | 39.1% | 28.5% | 20.8% | 2.3% | 2.9% | |
| Turkmenistan | 36.5% | 27.0% | 3.2% | 12.7% | 0.8% | 6.3% | 0.8% | 3.2% | 0.0% | 39.7% | 29.3% | 23.9% | 3.2% | 3.2% | |
| Uzbekistan | 43.0% | 28.7% | 3.0% | 11.9% | 3.4% | 4.7% | 1.0% | 2.6% | 0.5% | 37.3% | 27.2% | 19.7% | 2.5% | 3.6% | |
| Estonia | 54.8% | 24.5% | 2.1% | 13.4% | 1.0% | 26.5% | 0.8% | 19.6% | 5.2% | 33.0% | 22.7% | 12.2% | 2.1% | 1.0% | |
| Latvia | 61.9% | 34.7% | 1.5% | 10.6% | 0.8% | 23.1% | 4.5% | 9.0% | 6.8% | 24.1% | 18.1% | 14.0% | 1.5% | 3.0% | |
| Lithuania | 45.7% | 29.4% | 3.2% | 13.4% | 3.8% | 12.3% | 0.9% | 7.0% | 2.6% | 40.4% | 29.6% | 14.0% | 2.3% | 2.6% | |
| TOTAL-FSU | 38.7% | 29.1% | 2.9% | 12.2% | 3.3% | 5.9% | 1.0% | 3.2% | 0.9% | 45.8% | 36.1% | 15.5% | 2.1% | 2.4% | |

Source: Derived from data in Foreign Trade of Sovereign Republics and Baltic Economies in 1990, CIS Information Center for Statistics, Moscow, 1992

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